

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A door lock/unlock system for a vehicle, comprising:
 - a door lock state detector detecting whether a door of the vehicle is put in a lock state;
 - a door open state detector detecting whether the door is open;
 - a door lock mechanism through which the door is locked and unlocked; and
 - a controller connected to the door lock state detector, the door open state detector and the door actuator lock mechanism, the controller being arranged,
 - to compare a first lock/unlock state detected by the door lock state detector during the door open state with a second lock/unlock state detected by the door lock state detector at a moment when an open/close state is changed from an open state to a closed state,
 - to maintain the state of the door lock mechanism when the first lock/unlock state ~~corresponds~~ equals to the second lock/unlock state, and
 - to set the state of the door lock mechanism at the first lock/unlock state when the first lock/unlock state does not ~~corresponds~~ equal to the second lock/unlock state.
2. (Currently Amended) The door lock/unlock system as claimed in claim 1, wherein the controller is further arranged to count a ~~predetermined~~ time period from a moment that the open/close state is changed from the open state to the closed state and to compare the first lock/unlock state and the second lock/unlock state when the counted time period is smaller than the predetermined time period.
3. (Original) The door lock/unlock system as claimed in claim 1, wherein the door lock

mechanism comprises a door lock actuator which is connected to the controller and through which the door lock mechanism changes the lock/unlock state of the door.

4. (Original) The door lock/unlock system as claimed in claim 1, wherein the door lock state detector, the door open state detector and the door lock mechanism are attached to each of the doors of the vehicle.

5. (Currently Amended) The door lock/unlock system as claimed in claim 1, wherein the controller is further arranged to ~~repeatedly store~~ update a lock/unlock state detected by the door lock state detector, which is stored in a memory of the controller as the first lock/unlock state, when the door is open.

6. (Original) The door lock/unlock system as claimed in claim 1, further comprising an overlay switch for setting the lock/unlock state with a priority to the determination based on the door lock state detector.

7. (Original) The door lock/unlock system as claimed in claim 6, wherein the overlay switch includes a concentrated door lock/unlock switch through which a driver of the vehicle concentratedly controls the door lock/unlock state of all of the doors of the vehicle.

8. (Original) The door lock/unlock system as claimed in claim 1, further comprising a door locking knob through which a vehicle occupant in a passenger compartment of the vehicle is capable of locking the door.

9. (Currently Amended) A method for controlling a lock/unlock state of a door of a vehicle, the method comprising:

- detecting whether the door is put in a lock state;
- detecting whether the door is open;
- comparing a first lock/unlock state detected during the door open state with a second lock/unlock state detected at a moment when an open/close state is changed from an open state to a closed state;
- maintaining the state of a door lock mechanism for locking and unlocking the door when the first lock/unlock state ~~corresponds~~ equals to the second lock/unlock state; and
- setting the state of the door lock mechanism at the first lock/unlock state when the first lock/unlock state does not ~~corresponds~~ equal to the second lock/unlock state.

10. (Currently Amended) A door lock/unlock system for a vehicle, comprising:

- lock/unlock operation means for locking and ~~unlock~~ unlocking a door;
- lock/unlock mechanism interconnected with the lock/unlock operation means, the lock/unlock mechanism locking and unlocking the door according to an operation of the lock/unlock operation means;
- door open state detecting means for detecting an open/close state of the door;
- door lock state detecting means for detecting a lock/unlock state of the door; and
- door lock/unlock controlling means for controlling an operation of the lock/unlock mechanism, the door lock/unlock controlling means comparing the lock/unlock state detected by the door lock state detecting means during the door open state with the lock/unlock state detected by the door lock state detecting means at a moment that the door open state is changed from an

open state to a close state, maintaining the state of the door actuator when the lock/unlock state during the door open state ~~corresponds~~ equals to the lock/unlock state at the moment that the open/close state is changed from the open state to the close state, and setting the lock/unlock state of the door lock mechanism at the lock/unlock state during the door open state when the lock/unlock state during the door open state does not ~~correspond~~ equal to the lock/unlock state at the moment that the open/close state is changed from the open state to the close state.